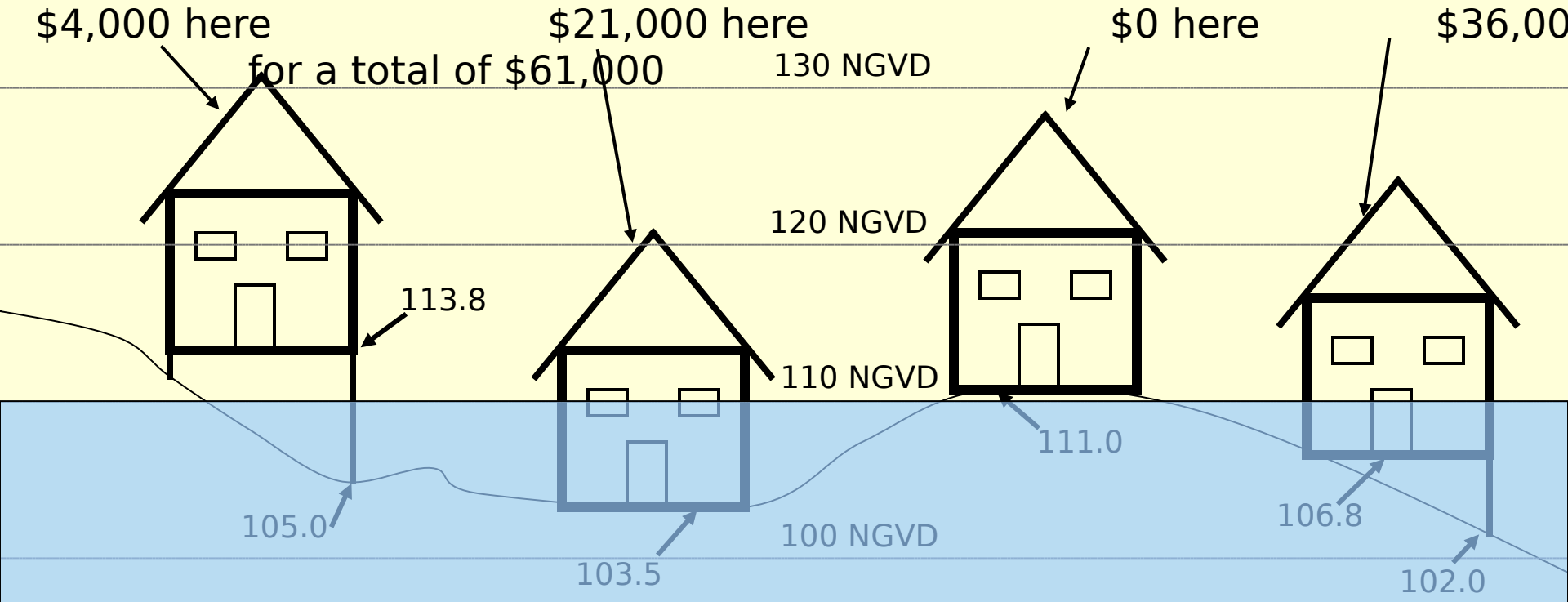
Imagine houses on this land.
There is variation in the elevation of the land and houses.

The houses all have different zero damage points.

The houses all have different first floor elevations.




Now imagine a flood that reaches a height of 110 NGVD.
Each house suffers a different dollar amount of damages.
The analyst's task is to estimate the total damages at every flood level taking into account the differences in elevations and structures.